CS 206	Data Structures	Spring 2014
	Homework 6	
Sungwon Kang		Due June 4

1. What does the following list look like after the first iteration of radix sort's outer loop?

class, leaks, every, other, refer, embed, array

2. If we are using Mergesort, what will the following array look like right before the *last* merge

35 57 53 26 50 15 22 21 25 14 11 2

3. If we are using Quicksort, what will the result be if we pivot on 35?

(Show the progress of sorting by presenting the result of each level of recursion.)

35 57 53 26 50 15 22 21 25 14 11 2

4. Heapify the following list, placing the maximum on top.

35 57 53 26 50 15 22 21 25 14 11 2

5. Beginning with the following array, what is the result of running the heapsort procedure (take max put it on the end of the heap, re-heapify) after four iterations?

57 50 53 26 35 15 22 21 25 14 11 2

6. Find the shortest path from a to k? Show intermediate steps of your solution. What is the length of the shortest path?